

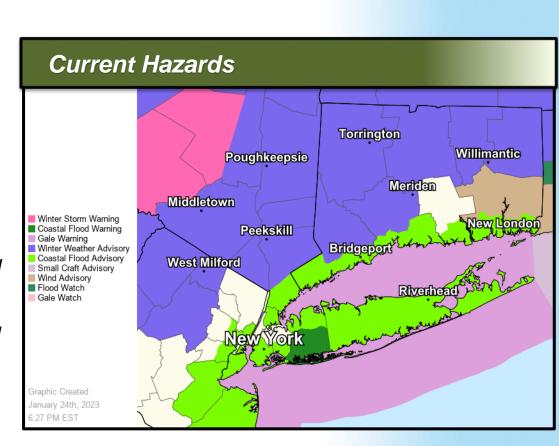


Midweek Winter Storm

Decision Support Briefing #3
As of: 6:00 PM Jan 24, 2023

What Has Changed?

- Winter Weather Advisory expanded into interior SW CT, Rockland, Putnam, and N Westchester Counties.
- Wind Advisory issued for Long Island and SE CT.
- Coastal Flood Warning issued for Southern Nassau County. Coastal Flood Advisory issued for much of the remainder of the coastline.













Main Points

| Hazard | Impacts | Locations | Timing |
|---|---|--|-------------------------------------|
| Snow 2 to 5" for Interior | Highest amounts in W Passaic and Orange County Changeover to all rain Wednesday Eve Heavy wet snow character Difficult Wed Aft/Eve commute | Interior portions of the Lower Hudson Valley, NE NJ, and SW CT | Wednesday AM - Wednesday Evening |
| Heavy Rain 1 to 2 inches, locally 3" possible | Highest amounts for coast Minor urban and poor drainage flooding likely Small river and stream flooding possible in NE NJ, Lower Hud and SW CT. | Heaviest rain along the coast | Late Wed through Wednesday Evening |
| Strong Winds SE/S gusts to 50 mph | Strong winds will blow down scattered tree limbs and blow around unsecured objects. Winds become west early Thu | Long Island and SE CT (35 - 45 mph gusts for remainder of coast) | Wednesday PM into Wed Night |
| Marine Gale Conditions | SE 35 gust 45 kt late Wed/Wed Night becoming W early Thu. Ocean seas 9 to 14 ft. Strong winds can cause hazardous seas which can capsize or damage vessels. | All nearshore waters | Wednesday PM through Thursday |



Coastal Impacts

Minor (1 to 2 ft flood

Moderate (2.5 ft AGL)

AGL) to locally



much of the coast.

oceanfront

Widespread minor to locally moderate

flooding likely Wed night high tide for

Scattered areas of dune erosion along



Localized moderate

flooding threat mainly for S

Nassau, possibly for S

Queens and coastal

Westchester and CT

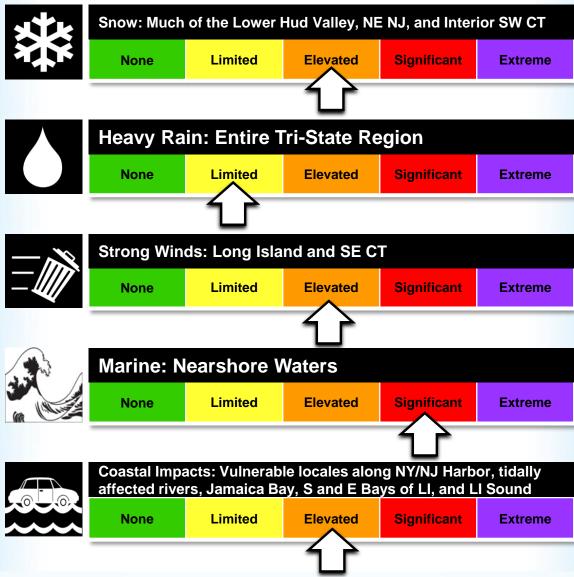
Wednesday Eve/Night High

Tide





Summary of Greatest Impacts











Snow



Forecast Challenges:

Location of snowband at the onset mid to late morning Wednesday (likely across NW interior). If this band develops farther southwest, this would be the scenario for reasonable worst case snowfall down to the coast.

Timing of transition from south to north Wed aft/eve will predicate how much snowfall, particularly the interior, receives.

Hazards and Impacts:

Western Passaic County, NJ and Orange County, NY

Winter Weather Advisory 7am Wed - midnight

- ✓ Snow Accum: 2-5", Reasonable Worst Case: 4-6"
- ✓ Snowfall rates: up to 1"/hr
- ✓ Snow Character: Wet and heavy
- lce Accum: Light glaze possible
- ✓ Timing: Snow develops Wed morning, becomes moderate Wed afternoon, changes to all rain by Wed evening.
- Impacts: Scattered downed tree limbs. Power outages possible.

Interior SW CT, Rockland, Putnam County, and N Westchester NY

Winter Weather Advisory 10am Wed - midnight

- ✓ Snow Accum: 2-3", Reasonable Worst Case: 3-4"
- ✓ **Snowfall rates:** Up to 0.5"/hr
- ✓ Snow Character: Wet and heavy
- ✓ Ice Accum: Light glaze possible
- ✓ Timing: Snow develops Wed morning, continues Wed
 afternoon, changes to all rain by early Wed evening.

NYC/NJ Metro, NW Long Island, coastal Connecticut

- ✓ Snow Accum: Less than 1", Reasonable Worst Case: 1-2"
- ✓ Snowfall rates: Less than 0.5"/hr
- ✓ Snow Character: Wet
- ✓ Timing: Snow develops Wed morning, quickly changes to all rain by Wed afternoon.



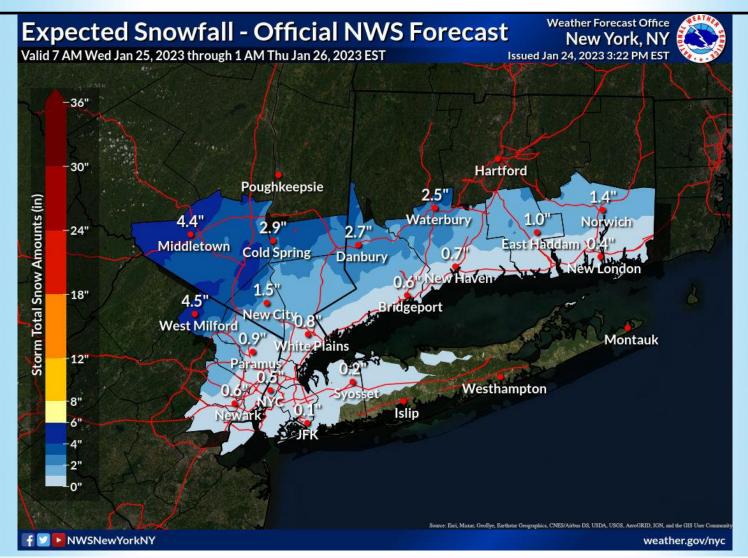






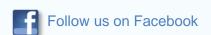


Most Likely Snowfall – Official Forecast





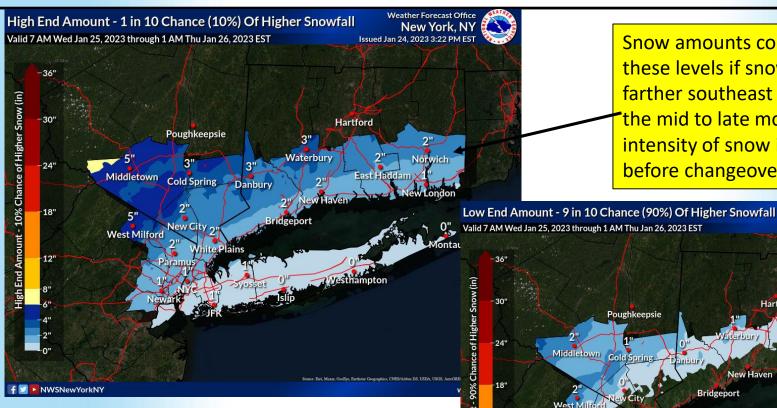






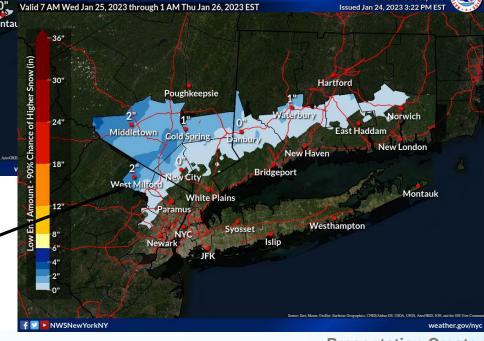


Probabilistic Snowfall Forecast



Snow amounts could be close to these levels if snow band develops farther southeast than forecast in 'the mid to late morning; or if intensity of snow is locally heavier before changeover.

Expect at least this much snow. This scenario is plausible if precipitation holds off until the mid to late afternoon, or if the change over from snow to rain is quicker than currently forecast.

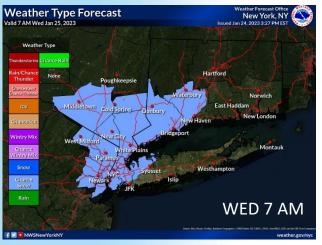


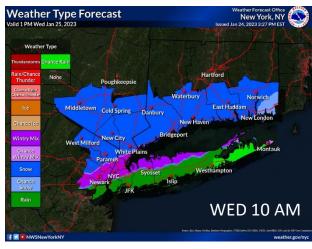
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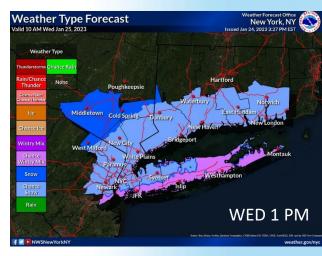


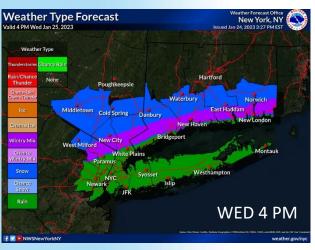


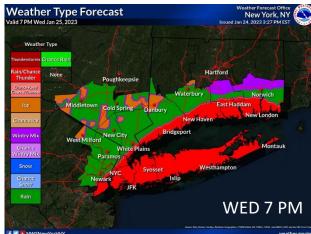
Winter Precipitation Timing

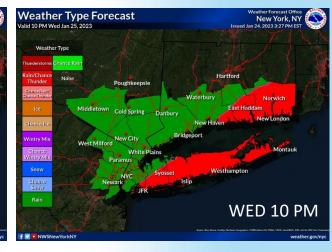






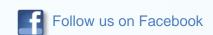










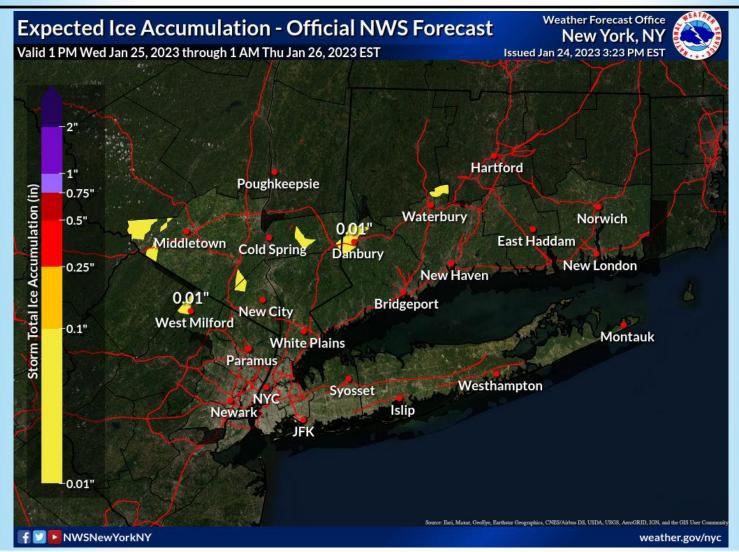








Most Likely Ice Accumulation – Official Forecast





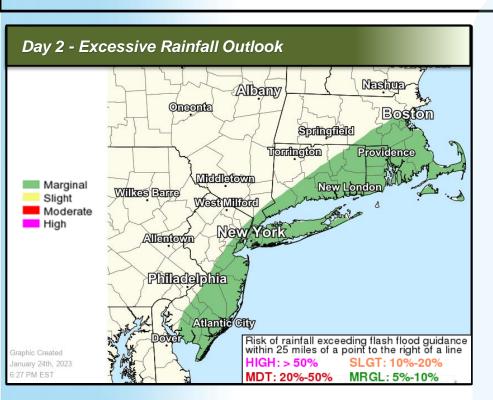








Heavy Rain



Forecast Challenges:

Flood impacts may be locally enhanced due to combo of moist soils, heavy rainfall and approaching storm tide Wed Eve.

Hazards and Impacts

- ✓ Total Rainfall: 1 to 2 inches, locally up to 3"
 - Heaviest rain along the coast, particularly S CT.
- ✓ Rainfall Rates:
 - ✓ 1/4 to 1/2" in 1hr
 - ✓ Moderate to High Probability of 1" in 3 hr

Impacts:

- Minor Flooding of Urban Areas and Lowlying Roads likely. This may be locally exacerbated near tidally affected rivers/streams and coastal communities with approach of high tide late Wed Eve/Night.
- Minor flooding along small rivers, stream and creeks possible, particularly quick responding basins of NE NJ, Lower Hud, and SW CT.

Timing:

 ✓ Heaviest rain – 6 hr period between 6pm to 2am



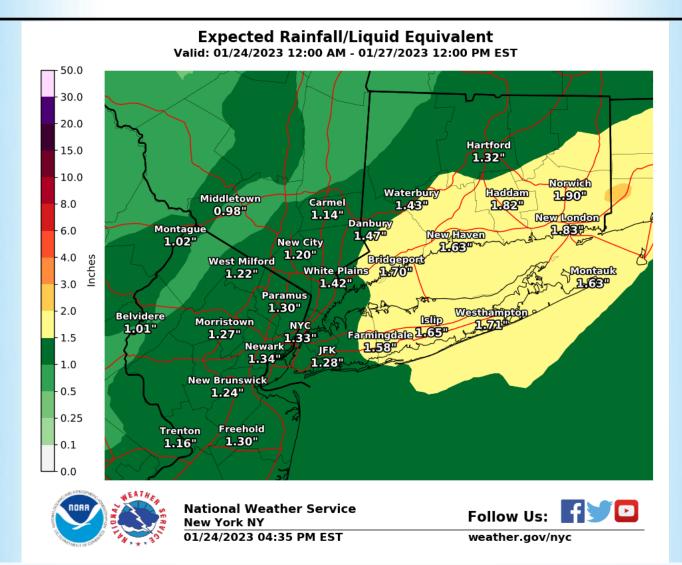






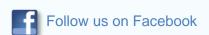


Official Rainfall Forecast





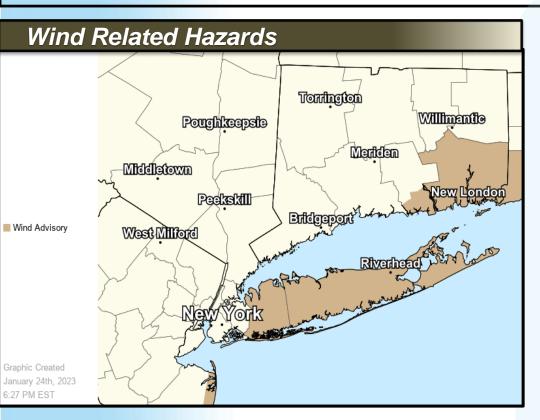








Strong Winds



Forecast Challenges:

Potential for locally damaging winds will be predicated on development of isolated thunderstorms Wed Eve/Night, particularly across LI and SE CT.

Hazards and Impacts:

Wind Advisory for Long Island and extreme SE CT

Strong Winds Late Wed/ Wed Night:

- ✓ LI and extreme SE CT SE/S winds of 25 to 35 mph with gusts to 50 mph.
 - There is potential for locally damaging wind gusts to 60 mph with a narrow line of heavy showers and isolated thunderstorms ahead of the cold front Wednesday night.
- Rest of coast SE/S winds of 20 to 30 mph with gusts 35 to 45 mph

Winds on Thursday - Winds will shift to the SW/W early Thursday morning with speeds of 20 to 30 mph with gusts 35 to 45 mph for the entire area.

Impacts: Strong winds will blow down scattered tree limbs and blow around unsecured objects. Power outages are possible.

Timing:

✓ Strongest winds from 5pm Wednesday through 4am Thursday.



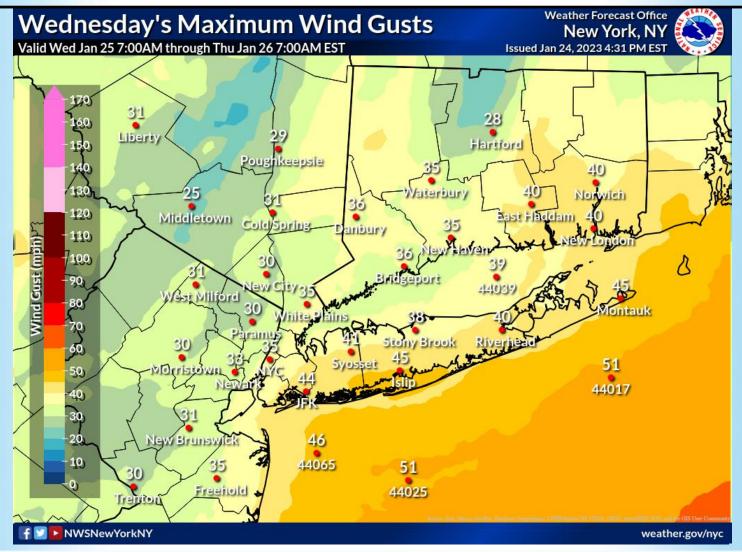




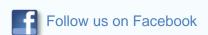




Strong Winds



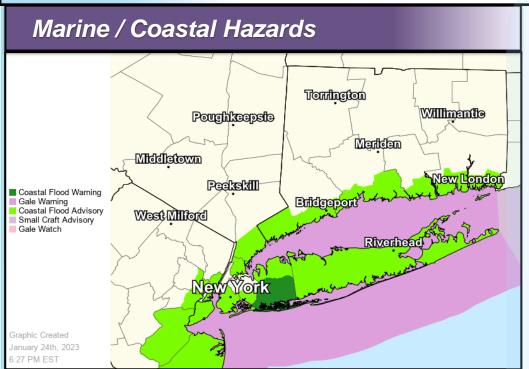








Coastal Flooding



For the latest coastal flood forecasts (hydrographs and tables) and the tools to visualize the potential coastal impacts (zoomable potential inundation map, impact catalogs, climatology, etc.) in your area of concern please go to the NWS New York, NY Coastal Flooding Page

Coastal Flood Hazards and Impacts:

- ✓ Southern Nassau County Widespread moderate coastal flooding expected (2 to 2.5 ft of flooding above ground).
- ✓ Vulnerable S Queens and SW Suffolk communities, as well as vulnerable shoreline Westchester and coastal CT communities - Isolated Moderate coastal flooding possible (around 2 ft of flooding above ground)
- ✓ Potential Impacts Widespread flooding of vulnerable areas near the waterfront and shoreline, including roads, parking lots, and homes and businesses with basements near the waterfront. Numerous road closures are likely, and vehicles parked in vulnerable areas near the waterfront will likely become flooded.
- ✓ Rest of coast Widespread Minor coastal flooding (1 to 2 ft of flooding above ground)

Oceanfront Impacts -

- √ 7-12' breaking waves along the oceanfront, resulting in scattered areas of dune erosion. Low probability for overwashes.
- √ 3 to 5' along Western LI sound and Orient Point shoreline resulting in beach erosion and splashover.

Timing:

 Around and near the times of high tide Wednesday Night













Coastal Flooding Thresholds



Minor (CF Advisory)

Moderate (CF Warning)

Major (Warning)

Picture







Hazard

- · Low threat of property damage...and no direct threat to life.
- 1 to 2 ft of inundation in shoreline and vulnerable areas.
- · Elevated threat of property damage...with a risk to life if one places themselves in unneccesary danger.
- 2 to 3 ft of inundation in shoreline and vulnerable areas.
- · Minor to no inundation of surrounding coastal communities.
- · Significant threat to life and property.
- 3-5+ ft of inundation in shoreline and other vulnerable areas.
- · Minor to moderate inundation (1 to 3 ft) of surrounding coastal communities that rarely experience coastal flooding.

Impact

- · A few shoreline and vulnerable roadways and adjacent properties will experience shallow flooding.
- Several shoreline and vulnerable area home and businesses will experience water inside.
- · Several low-lying coastal and shoreline roads will be closed.
- A few cars may take on water or even be destroyed.
- Evacuations will be necessary for the most vulnerable shoreline and coastal areas.
- · Many coastal communities will experience damage...with some shoreline and flood prone homes and businesses being destroyed.
- · Many cars will likely be submerged or washed away.
- Several sections of nearshore roads and escape routes will be impassable and a few could be washed out.
- · Flood waters may extend well inland in low lying areas.











Event Summary

A quick moving low pressure system will affect the area Wed into Wed Night.

- ✓ Potential for 2-5" of snowfall, across interior portions of northern NJ, Lower Hudson Valley and SW CT. Snow will change to rain everywhere by Wednesday night.
- ✓ Heavy rainfall of 1.0" to 2.0", locally 3.0" for the Tri State. Urban and poor drainage flooding likely late Wed into Wed Night. Small river and stream flooding possible.
- ✓ Southeasterly to southerly winds 20-35 mph with gusts 35-50 mph are likely over coastal areas late Wednesday into early Thursday AM, highest for LI and SE CT. Winds then shift to the SW/W Thursday morning with similar speeds through Thursday afternoon.
- ✓ Gale conditions are expected on all waters Wednesday evening through Thursday afternoon.
- ✓ Widespread minor to locally moderate coastal flooding potential for much of the coast. Moderate coastal flooding likely for south facing communities of southern Nassau, and possible for SW Suffolk, S Queens, and coastal Westchester and S CT for Wednesday Night high tide cycle.











Contact and Next Briefing Information



Next Briefing

When: Around 6:00 AM Wednesday

Method: Email







Disclaimer: The information contained within this briefing is time-sensitive, do not use after 6 AM Wednesday (01/25/23).





